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| 24498 7590 12/21/2099<br>Robert D. Shedd, Patent Operations<br>THOMSON Licensing LLC<br>P.O. Box 5312<br>Princeton, NJ 08543-5312 |             |                      | EXAM                | EXAMINER        |  |
|   |             |                      | BEHARRY, NOEL R     |                 |  |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/519.633 LESENNE ET AL. Office Action Summary Examiner Art Unit NOEL BEHARRY 2446 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 28 August 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 26-54 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 26-54 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 28 December 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Attachment(s)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

This communication is in response to applicant's response filed under 37 C.F.R.
 §1.111 in response to a non-final office action. Claims 26, 28, 33, 37, 40, 42-48 and 52-

54 have been amended. Claims 26-54 are subject to examination.

Acknowledgment is made to applicant's amendment to claims 26, 28, 40 and 42 to obviate previous objection to these claims. Previously raised objection to claims 26, 28, 40 and 42 are hereby withdrawn.

- Acknowledgment is made to applicant's amendment to claims 33 and 42-45 to obviate previous 35 U.S.C. 112 rejections to these claims. Previously raised 35 U.S.C. 112 rejections to claims 33 and 42-45 are hereby withdrawn.
- Acknowledgment is made to applicant's filing of a Terminal Disclaimer in this
  application to obviate previous Double Patenting rejection. Previously raised Double
  Patenting rejection is hereby withdrawn.

## Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

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### Claim Rejections - 35 USC § 101

6. Claims 26-54 are rejected under 35 U.S.C. 101 which reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 7. Claims 26-45 are rejected under 35 U.S.C. 101 as being software per se. In particular, the applicant's specification (Page 9, Lines 29 Page 10, Lines 5) discloses the "units" and "modules" as being "one and the same piece of software."
- Claims 46-51 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 46-51 are directed towards a computer-implemented method. However, claims 46-51 do not appear to be tied to a statutory class nor does it transform the underlying subject matter. As required by MPEP 2106 II Section A:

The claimed invention as a whole must be useful and accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." \*\*>State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d 1368, 1373-74, 47 USPQ2d 1596, 1601-02 (Fed. Cir. 1998).< The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

Claims 46-51 are examples of method claims that would not qualify as a statutory process since the claims merely recite a method with no physical transformation. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the

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apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. For claims 46-51, there is no physical transformation of anything to another state or thing. "A process is...an act, or series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing." *Cochrane v. Deener, 94 U.S. 780, 788 (1877).* ""Transformation and reduction of an article "to a different state or thing" is the clue to the patentability of a process claim that does not include particular machines."" *Diamond v. Diehr, 450 U.S. 175, 184 209 USPQ 1, 7 (1981) (quoting Gottschalk v. Benson, 409 U.S. 63, 70, 175 USPQ 673, 676 (1972)).* Therefore, the method is not a patent eligible process under 35 USC 101 and is directed towards non-statutory subject matter.

 Claims 52-54 are rejected under 35 U.S.C. 101 as being directed to nonstatutory subject matter.

In this case, for example claim 52 recites, "A computer readable medium encoded with a computer program comprising the steps of..." would normally be considered statutory unless the specification defines "computer readable medium" as including intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they are conveyed.

Claims 52-54 are not limited to tangible embodiments. Specifically, computerreadable medium/media has not been defined in the specification and therefore is not limited to tangible embodiments. Instead the broadest reasonable interpretation will be

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taken which is defined as including both tangible embodiments [e.g. removable storage drive, hard disk] and intangible embodiments [e.g. signals or transmission or carrier medium/media]. As such the claim is not limited to statutory subject matter and is therefore non statutory.

To overcome this rejection, the examiner encourages applicant to amend the claims to include one of the following limitations: non-transitory storage medium, non-transmissible storage medium and non-transmission storage medium.

### Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 26-29 and 31-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffberg et al. (Hoffberg hereafter) (US 5,920,477) (Applicant's IDS dated 12/28/2004).

### Regarding claims 26 and 52, Hoffberg teaches,

recognition unit for recognizing synchronization signals in at least one audiovisual programme received, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, said recognition unit comprising: (the system of Video Program System Signal

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Transmitters, in which the VCR is programmed by entering a code for the Video Program System signal, which is emitted by television stations in West Germany. Each separate program has a unique identifier code, transmitted at the beginning of the program, so that a user need only enter the code for the program, and the VCR will monitor the channel for the code transmission, and begin recording when the code is received, Col 21, Lines 52-60)

a reception module and a recording module, for receiving and recording in a storage space (VCR, Col 21, Lines 53-60), recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme, (unique identifier code, Col 21, Lines 53-60)

a reception module for receiving at least one transmitted stream carrying said audiovisual programme, (video signal reception device 2501; tuner 2502; Fig. 25 & Col 68, Lines 41-Col 69, Lines 14)

a detection module for detecting said synchronization signals in said audiovisual programme received, by means of said recognition elements stored in said storage space, by recognition in the content of said audiovisual programme received, of said extracted portion, (unique identifier code, Col 21, Lines 53-60) and

a transmission module for transmitting action instructions in case of detection of said synchronization signals in said audiovisual programme, said instructions being designed so as to trigger at least one action. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

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## Regarding claim 27, Hoffberg teaches,

wherein said reception and recording modules for receiving and recording said recognition elements are designed so as respectively to receive and record also at least one timeout lag and in that the timeout module is designed to use said lag. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay, Col 45, Lines 12-26)

#### Regarding claim 28, Hoffberg teaches,

wherein the modules for receiving and recoding recognition elements and the module for transmitting action instructions are designed so as respectively to receive, record and transmit identifiers relating to said actions to be triggered. (Col 21, Lines 53-60)

## Regarding claim 29, Hoffberg teaches,

wherein each of said portions of content consists of at least one of the following portions: an image, an image part, a sound and any combination of at least two of said portions. (video program system signal, Col 21, Lines 53-60)

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Regarding claim 31, Hoffberg teaches,

wherein said recognition elements include at least one time information item, said detection module being designed to detect said portions of content in conjunction with said time information item and the transmission module being designed to transmit said action instructions in case of such detection. (the user would be prompted to explicitly choose the program sequence by day, time, channel and duration, Col 67, Lines 61-66)

Regarding claim 32, Hoffberg teaches,

wherein said time information item comprises at least one information item chosen from among a date of detection and a detection time slot. (the user would be prompted to explicitly choose the program sequence by day, time, channel and duration, Col 67, Lines 61-66)

Regarding claim 33, Hoffberg teaches,

wherein said recognition elements include at least one channel reference, said detection module detecting said portions of content in conjunction with said channel reference and the transmission module being designed to transmit said action instructions in the case of said detecting. (the user would be prompted to explicitly choose the program sequence by day, time, channel and duration, Col 67, Lines 61-66)

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## Regarding claim 34, Hoffberg teaches,

wherein the reception module for receiving the recognition elements is designed to directly receive said extracted portion from among said recognition elements and the recording module is designed to record said extracted portion in the storage space. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

#### Regarding claim 35, Hoffberg teaches,

wherein the reception module for receiving the recognition elements is designed to receive from among said recognition elements, instructions for extracting said extracted portion in at least one stream of an audiovisual programme previously received by the stream reception module, and said recording module is designed to extract directly said portion of said stream according to said extraction instructions and to record said portion in the storage space. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

## Regarding claim 36, Hoffberg teaches,

wherein the reception module for receiving the recognition elements is designed to receive from among said recognition elements, at least one identifier of said extracted portion, and in that said detection module is capable of retrieving from the storage space said extracted portion previously recorded and associated with said identifier, so

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as to recognize in the content of said audiovisual programme received said extracted portion. (assigning identifiers to corresponding ones of the mapped ranges, each of the identifiers specifying for the corresponding mapped range a procedure and a address of the corresponding subset of the stored image data, Col 28, Lines 37-41)

## Regarding claims 37, 43-45, 47, 48 and 54, Hoffberg teaches,

specification unit for specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, and said synchronization signals being intended to be detected in at least one transmitted stream carrying said audiovisual programme and thus to trigger at least one action, (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

wherein said specification unit comprises

a preparation module for preparing recognition elements making it possible to obtain at least one extracted portion of the content of said audiovisual programme, (receives identifying data from at least one of said input device and the data input, Col 25, Lines 62 – Col 26, Lines 2) and

a transmission module for transmitting said recognition elements independently of transmissions of said audiovisual programme, to at least one recognition unit intended to detect said synchronization signals in said transmitted stream carrying said

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audiovisual programme, by recognizing said extracted portion in the content of said audiovisual programme, (the user need only enter the code for the program, and the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60) and

the preparation and transmission modules of said unit are designed respectively to prepare and transmit at least one action timeout lag in case of detection of said synchronization signals, (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay, Col 45, Lines 12-26)

said specification unit being capable of cooperating with said recognition unit.

(the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

Regarding claim 38, Hoffberg teaches,

wherein the preparation and transmission modules of said unit are designed respectively to prepare and transmit identifiers relating to said actions to be triggered in case of detection of said synchronization signals. (the user need only enter the code for the program, and the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & assigning identifiers to corresponding ones of the mapped ranges, each of the identifiers specifying for the corresponding mapped range a procedure and a address of the corresponding subset of the stored image data. Col 28, Lines 37-41)

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## Regarding claim 39, Hoffberg teaches,

wherein said action identifiers relate to at least one of the following actions: broadcasting of an interactive service, triggering of an interactive service, triggering of an update of an interactive service, triggering of a recording of said audiovisual programme and connection to a website. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60)

#### Regarding claims 40 and 46, Hoffberg teaches,

assembly for activation by recognition of synchronization signals in at least one audiovisual programme received, said audiovisual programme comprising an audiovisual content intended to be broadcast to users and control information, the activation assembly comprising: (the system of Video Program System Signal Transmitters, in which the VCR is programmed by entering a code for the Video Program System signal, which is emitted by television stations in West Germany. Each separate program has a unique identifier code, transmitted at the beginning of the program, so that a user need only enter the code for the program, and the VCR will monitor the channel for the code transmission, and begin recording when the code is received, Col 21, Lines 52-60)

a recognition unit for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme, by recognition of at least one

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extracted portion of the content of said audiovisual programme, by means of recognition elements making it possible to obtain said portion and recorded in a storage space, (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60) and

an activation unit designed to trigger at least one action in case of detection of said synchronization signals by the recognition unit, wherein at least one of said recognition and activation units is designed to delay the triggering of said action by at least a determined timeout lag, in case of detection of said synchronization signals, (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay, Col 45, Lines 12-26)

said recognition unit being in accordance with claim 26 (see rejection of claim 26).

## Regarding claim 41, Hoffberg teaches,

wherein said activation assembly is designed to receive said timeout lag with said recognition elements. (may incorporate a delay, Col 45, Lines 12-26)

## Regarding claims 42 and 53, Hoffberg teaches,

synchronization system comprising:

a specification unit for specifying synchronization signals associated with at least one audiovisual programme, said audiovisual programme comprising an audiovisual

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content intended to be broadcast to users and control information, (the system of Video Program System Signal Transmitters, in which the VCR is programmed by entering a code for the Video Program System signal, which is emitted by television stations in West Germany. Each separate program has a unique identifier code, transmitted at the beginning of the program, so that a user need only enter the code for the program, and the VCR will monitor the channel for the code transmission, and begin recording when the code is received, Col 21, Lines 52-60)

a recognition unit for recognizing said synchronization signals in at least one transmitted stream carrying said audiovisual programme, by recognition of at least one extracted portion of the content of said audiovisual programme, in the audiovisual programme received, (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60) and

an activation unit designed to trigger at least one action in case of detection of said synchronization signals by the recognition unit, the recognition unit and the activation unit forming an activation assembly, wherein the specification unit is designed to prepare and transmit to the recognition unit recognition elements making it possible to obtain said extracted portion, as well as at least one action timeout lag in case of detection of said synchronization signals, and in that the activation assembly is capable of delaying the triggering of said action according to said lag transmitted, in case of detection of said synchronization signals, (the VCR will monitor the channel for the

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code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay. Col 45. Lines 12-26)

the specification unit being in accordance with claim 37 (see rejection of claim 37).

## Regarding claim 49, Hoffberg teaches,

wherein said audiovisual programmes comprise at least one recognition part containing at least one of said recognition portions, and at least one live transmission intended to be broadcast following said recognition part, in such a way that said synchronization signals are detected during the broadcast of said recognition part and that said action is triggered during the broadcast of said following live transmission, by means of said timeout lag. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay, Col 45, Lines 12-26)

## Regarding claim 50, Hoffberg teaches,

wherein said audiovisual programmes comprise at least one recognition part containing at least one of said recognition portions, and at least one live transmission intended to be broadcast following said recognition part, in such a way that said synchronization signals are detected during the broadcast of said recognition part and that said action is triggered during the broadcast of said following live transmission, by means of said timeout lag. (the VCR will monitor the channel for the code

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transmission and begin recording when the code is received, CoI 21, Lines 53-60 & may incorporate a delay, CoI 45, Lines 12-26)

Regarding claim 51, Hoffberg teaches,

wherein said audiovisual programmes comprise at least one recognition part containing at least one of said recognition portions, and at least one live transmission intended to be broadcast following said recognition part, in such a way that said synchronization signals are detected during the broadcast of said recognition part and that said action is triggered during the broadcast of said following live transmission, by means of said timeout lag. (the VCR will monitor the channel for the code transmission and begin recording when the code is received, Col 21, Lines 53-60 & may incorporate a delay, Col 45, Lines 12-26)

#### Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over
   Hoffberg in view of Solvason (WO 02/21840 A2) Applicant's IDS dated 12/28/2004).

Regarding claim 30. Hoffberg teaches.

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said detection module being designed to detect at least two of said portions of content (Col 44, Lines 5-36) and the transmission module being designed to transmit said action instructions in case of such detection (the VCR will monitor the channel for the code transmission and being recording when the code is received, Col 21, Lines 53-60)

Hoffberg fails to explicitly teach,

wherein said recognition elements include at least one Boolean operator.

However, Solvason teaches,

wherein said recognition elements include at least one Boolean operator. (Page 10, Lines 22-Page 11, Lines 8)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Hoffberg** to include the above recited limitations as taught by **Solvason** in order to define multiple recognition elements for the same element with different actions having different criteria (**Page 11**, **Lines 2-4**).

### Conclusion

**Examiner's Note:** Examiner has pointed out particular reference contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and Figures may apply as well. It is respectfully requested form the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed

invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOEL BEHARRY whose telephone number is (571)270-5630. The examiner can normally be reached on M-TH 10-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. Jeffrey Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. B./

Examiner, Art Unit 2446

/Benjamin R Bruckart/ Primary Examiner, Art Unit 2446